



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,240	01/11/2005	Kaisa Putkisto	METSO-22	9092
36528	7590	04/17/2006	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			PARKER, FREDERICK JOHN	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SUPPLEMENTAL
Office Action Summary

Application No.

10/507,240

Applicant(s)

PUTKISTO ET AL.

Examiner

Frederick J. Parker

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9-9-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1762

DETAILED ACTION

This supplemental Office Action is in response to the phone call of 4/23/06 of Applicants' representative, which brought the preliminary amendment to the Examiner's attention. The rejections and objections of the previous Office Action are withdrawn and replaced with those below. Mailing of this Action will re-start the time period.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title is too generic and not specifically directed to the claimed inventive subject matter.
3. The disclosure is objected to because of the following informalities: on page 1, lines 13-14, it is contradictory to disclose a "grounding electrode" to have a predetermined potential other than ground. If so, its not a grounding electrode. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1762

5. Claims 16,22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The “hard heated grounding roller” is not present in the original filing, wherein on page 4 is described grounding roller 2, heated hard roller 3, and resilient roller 4; thus the limitations of the claims as recited constitute New Matter. See also [0016].

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 10,11,16,17,18,21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 21 is vague and indefinite because (1) it is unclear how a ground electrode can be other than at ground potential, e.g. how it can be at another “selected potential” and still be a grounding electrode, and (2) it is unclear what is intended by the step “finishing the powder layer”.
- Claims 10,11,16,17,18,22-24 are vague and indefinite because the use of the relative term “hard” fails to convey the nature/ hardness of the heated roll 3, “hard” would not be ascertainable by the skilled artisan, and it is not defined by the specification.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 8,9, 14, are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor-Brown.

Taylor-Brown discloses a method of uniformly electrostatically powder coating a continuous web (metal, paper, plastic; col. 2, 14-17) comprising feeding the traveling web 19 using rollers, and applying electrostatically charged particles 8 on the opposite side of the web relative to rotating roller 1 with outer insulated surface 2 which may be grounded (col. 4,48-53). Roller 1 may also be charged and drum 4 grounded to attract charged particles to the web per claims . The grounding device is a rotating roller per claim 6. The description of col. 4, 3-14 and elsewhere meet the conventional meaning of a corona charging electrode per claim 4. Coated web is then finished, see col. 4, 25-29.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1762

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 15,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor-Brown in view of Liberto (ed.).

Taylor-Brown is cited for the same reasons previously discussed, which are incorporated herein. Tribo charging is not disclosed.

The Liberto handbook discloses that it is conventional to charge powders to be electrostatically applied to substrates using either corona charging or tribo charging because both are “dependant on effectively applying charge to the surface of the individual powder particles”, thereby establishing an equivalence between the two charging methods for powders being electrostatically applied to a substrate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Taylor-Brown by utilizing tribo charging in place of corona charging of the powder because Liberto teaches both charging methods will effectively apply charge to the individual powder particles being electrostatically applied to a substrate.

13. Claim 10-13,16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor-Brown in view of Divigalpitiya et al 2002/0119255

Art Unit: 1762

Taylor-Brown is cited for the same reasons previously discussed, which are incorporated herein. A post-heat roller is not disclosed.

Taylor-Brown teaches that after particle deposition to the web, the coated web is heated by an oven and moved between a rotating electrically grounded roller and rubber (= resilient") backup roller 18.

Divigalpitiya et al is also directed to applying particles onto webs, followed by heating the particle coated web to make it receptive to particles followed by movement through nip rollers (without limitation, but citing rubber/ rubber coated, or metal rollers, etc) to secure the particles [0054-0056]. The reference further teaches that heating may be carried out by a heated roller ("hot can"), oven, or radiation or induction heater. Thus the equivalence of an oven and heated roller to heat the particle coated web is established by the reference, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Taylor-Brown and substitute the oven with a heated roller given the equivalence of the heating means established by Divigalpitiya et al, with the expectation of achieving a similar outcome given the equivalence of the heating means. There is no evidence that the rollers are other than of the same potential, i.e. uncharged.

14. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor-Brown in view of Liberto and further in view of Divigalpitiya et al 2002/0119255

Taylor-Brown and Liberto are cited for the same reasons previously discussed, which are incorporated herein. A post-heat roller is not disclosed.

Art Unit: 1762

Taylor-Brown teaches that after particle deposition to the web, the coated web is heated by an oven and moved between a rotating electrically grounded roller and rubber (= resilient") backup roller 18.

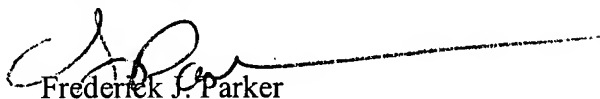
Divigalpitiya et al is also directed to applying particles onto webs, followed by heating the particle coated web to make it receptive to particles followed by movement through nip rollers (without limitation, but citing rubber/ rubber coated, or metal rollers, etc) to secure the particles [0054-0056]. The reference further teaches that heating may be carried out by a heated roller ("hot can"), oven, or radiation or induction heater. Thus the equivalence of an oven and heated roller to heat the particle coated web is established by the reference, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Taylor-Brown in view of Liberto and substitute the oven with a heated roller given the equivalence of the heating means established by Divigalpitiya et al, with the expectation of achieving a similar outcome given the equivalence of the heating means. There is no evidence that the rollers are other than of the same potential, i.e. uncharged, per claim 11.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Frederick J. Parker
Primary Examiner
Art Unit 1762

fjp